

Internal File

## 2003 Annual Report Review

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**Permittee:** Canyon Fuel Company, LLC  
**Mine Name:** SUFCO Mine  
**Permit Number:** C/041/002  
**Date Report Received:** March 31, 2004

Assigned Reviewers:		Date Completed
Peter Hess; Engineer/Inspector	PHH	May 28, 2004
Steve Fluke, Hydrologist	STF	June 11, 2004
Jerriann Ernsten, Biologist	JAE	June 29, 2004

**Instructions:** The assigned staff will review their respective portions of the Annual report and provide a written determination (findings) on how the mine has or has not met the permit requirements for reporting. If the report is deficient or remedial action is required to obtain compliance, this should be noted and the inspector notified. Once all reviewers have completed the report, they should initial it and a copy will be filed in the Mine Internal File.

**Assignments:**

**Inspectors:** Review each cover sheet, AVS Legal/Financial, Mine Sequence Maps.  
**Hydrologists:** Review Water Monitoring Data, Precipitation and Climatological Data, Non-Coal Waste  
**Biologists:** Review Vegetation/Revegetation Success Monitoring, Raptor Survey  
**Engineers:** Review Subsidence Monitoring Data, Annual Impoundment Certification, Annual Overburden, Spoils, Refuse, Floor, etc.

SECTIONS TO REVIEW	SUBMITTED		FINDINGS
	YES	NO	
Cover Sheet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Submitted information appears to be complete and adequate.
AVS; Legal/ Financial Update	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ownership and control information included as Appendix "C" is identical to that information which has been submitted to the Utah Dept. of Commerce.
Mine Sequence Map	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The permittee mined 7,129,000 tons during 2003. A map submitted as part of the annual report depicts extraction of 10,300 feet of longwall panel was extracted from the 2 Left off of Pines East panel. 3, 850 feet of the 3 Lt longwall panel were extracted, after the completion of 5,100 feet of headgate. Also, 8,450 of three entry development was completed in the 4 Left headgate, along with 1,800 feet in the 5 Left headgate. 1,250 feet of six entry development was also completed to access 3 Pines North, which was developed 1800 feet. The map is P.E. and P.G. certified by Wes Sorensen and Mark Bunnell respectively.
Water Monitoring Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water monitoring data is on file in the Division database for the three required monitoring quarters of 2003.
Precipitation & Climatological Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	A computer disk containing temperature and precipitation data for 2003 is included in the Annual Report.

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	YES	NO	
Non-Coal Waste report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The permittee applied for and received a Division approval to abandon pan line sections in the 2 Left Pines East area of the Mine on September 9, 2003.(TASK ID#1653).
Subsidence Monitoring Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The permittee's annual subsidence report (Appendix B) was completed by John M. Black, Utah registered professional land surveyor. The permittee monitors thirteen areas within the SUFCO Mine permit area, nine of which are considered dormant. Area 12 involves the majority of active mining, including longwall extraction as well as primary gate road development mining. Area 12 consists of six longwall panels. Longwall mining was initiated in this area in September of 2001; to date, the second longwall panel (2 Left Pines East) was completed in September of 2003. The 3 Left panel has now undermined the East fork of Box Canyon. Effects of this undermining of this perennial stream are still being evaluated by the Division, the USFS, the BLM and the permittee. Map 1 which depicts the amounts of subsidence/heave in the active areas of the permit area is certified by a Utah registered professional engineer.
Annual Impoundment Certification	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Annual impoundment certifications for the Mine site and waste rock sediment ponds are on file at Division headquarters in Salt Lake City, Utah.
Annual Overburden, Spoil, Refuse, Floor, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This report is not required.

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	YES	NO	
Vegetation Data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Vegetation sampling for the calendar year 2003 includes the Waste Rock Disposal (WRD) site and Demonstration plots (DEM). Stanley surveyed percent cover, species composition and species richness.</p> <p>WRD and DEM results: The dominant vegetation type on all sites is grass. Shrubs and especially forbs are slow are less than 15% of plant cover. Forbs and shrubs are more abundant on gouged or dimpled vs smooth treatments. Stanley recommends spreading shrub seed endemic to the reference site and spread them on the WRD site to build its seed bank. Forbs are declining in percent cover from previous years.</p> <p>Vegetation study includes the Pines Tract area (PTA). Zobell studied the effects of undermining on Link Canyon Columbine (LCC) and on riparian areas. He compared photos of the area that were taken at photo/monitoring points in 2002 and 2003.</p> <p>PTA results: LCC is declining and in fair to poor condition at the photo/monitoring sites. Zobell suggests the decline is due to drought conditions and heavy grazing during 2002. In future years, DOGM should review climatological data to see if plant decline follows drought conditions.</p>
Revegetation Success Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No monitoring for bond release.
Raptor Survey	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The annual report includes a 2003 raptor survey for the Sufco mine, property and lease boundaries. There are currently no active nests within 1/2 mile if the mine and associated disturbed areas.

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	YES	NO	
Other Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Macroinvertebrate: Shiozawa Survey of the East Fork of Box Canyon (EFBC) prior to undermining the stream channel in fall 2003. Baseline only includes a fall survey. Survey includes three sampling sites with a reference in the Main Fork of Box Canyon.</p> <p>Difficult to use the MFBC as a reference because the two canyons have different geochemical composition. DOGM believes that comparison will be best within individual sampling sites among years, even though stream composition is dynamic.</p> <p>Macro results for the 4 sites in EFBC: Density ~ 8,000-13,000 individuals per site Taxa ~ 11-14 different taxa per site Major macros included: midges, mayflies, stoneflies, caddisflies, and flies.</p> <p>Conclusions are basically irrelevant given that long stretches (over 300') of the channel are no longer flowing - because of subsidence. No water - no data!</p> <p>Riparian Plant Communities: Collins Survey of the East Fork of Box Canyon (EFBC) prior to undermining the stream channel in fall 2003. Baseline includes a fall survey of 25 sampling stream and spring sites. Measurements included parameters of USFS Level III, total cover, cover by species, and photographs. By the look of the the leaves in the pictures, the survey was conducted very late in plant-seasonal life cycle. Forb representation could've been markedly down. Goal of the survey was to provide a baseline for vegetation prior to subsidence of the stream channel.</p> <p>Cultural: Billat (JBR) MOA compliance survey to monitor 5 of the 13 eligible sites. Mining subsidence caused damage to 42SV2433 and 42SV2433. Water damage continues to erode these sites. Billat expects continued water erosion, although USFS archeologist expects differently (field visit 6/2004). Mining or other erosive causes have not affected 42SV2423, 42SV2425, or 42SV2492.</p> <p>Report must be relocated in Confidential.</p>